the Ningthee River and from that time ordered his subjects to burn their dead (Hodson 1908, 116-117). The body is even today placed in a coffin before cremation, which supports the contention that burial was practiced in pre-Hindu times in Manipur.2 Secondary burial was a common practice among the people in the valley. After the death of an individual, the body is first buried in the ground or left in the wild to be decomposed or to get the flesh eaten by wild animals or insects. After the body got decomposed, the remaining bones and skull were collected, cleaned, and then buried again using burial urns or a proper coffin. According to the court Chronicle Cheitharol Kumbaba, Charairongba (r. 1698-1709) was the last king of Manipur whose secondary burial ceremony was performed. He died on July 14, 1709, and his 'Lu-pung-thonba' ceremony was performed a year after on March 1710 CE. Lu-pung-Thonba (erecting secondary burial mound) is a secondary burial ceremony. The Meitei had the custom of erecting a burial mound over the skull of a deceased as a part of a secondary burial ceremony. This custom is recorded in the court chronicle Cheitharol Kumpapa as Lu-Pung Thonba.3 The first funeral ceremony was performed on the third day after death. After one year or when the body became decomposed, the body was exhumed and the Lu-pung-thonba ceremony was performed. The Meitei families assigned for the secondary burial of the royalty are well recorded in the 12th-century edict called 'Loiyumba Sinyen'. In the first funeral ceremony of a pre-Hindu Meitei King and queen, the functionaries of the Thongpam family make the 'Ku' or coffin. The functionaries of the Tokpam family dig in the burial ground. The members of the Ayam family bury the royal corpse under the ground and performed the closing ceremony known as "Mangthong-lonba" (lit, closing the gate of the grave). The members of the Mangsatabam family supervise the royal grave. In the secondary burial ceremony, the functionaries of the Ayam family perform the opening ceremony known as "mang-thong-hangba' (lit, opening the gate of the grave). The Tokpam family digs the grave and the Mangkhom family picks up the soil. The Sadokpam family exhumes the royal corpse. The Khuman Siyatpham family is assigned to cut off the head. The Hangnem family kills the body-eating insects. The Hanoibam family crushes the dead body eating worms. The Sarotkaipam family collects the bones. The Khuman Khoipam family washes the skull in alcohol. The Saograkpam, Khoipam, and Sampantram families put the skin and bones in the urn and bury them. The skull is dried in the sun for five days. The Sarupam family supervises the skull. The Tokpam family again digs the burial ground4. The Mangkhom family picks up the soil. The head is put in an urn made by the potters of the Andro village. The Palluchum family buries the urn. The Tongpam family raises a mound over the grave and finally, the Thongbam family performs the closing ceremony. According to the archaic text, Thawan Thaba Hiren gold masking of the skull was practiced by the royalties in ancient Manipur. The book gives in detail the masking of the skulls with gold and silver in the secondary funeral ceremony of Meitei princess Tampha Wangamlon and Khuman princess Chakpa Samphabi, consort of King Thawan Thaba (r. 1195-1231 CE). The corpse is placed in a coffin resembling a dugout canoe. Then the coffin is buried with funeral rituals. After one year, the coffin was exhumed5. A specialist separates the skull from the body. The skull is washed in alcohol and dried in the sun. Then, the skull is covered with a silver

mask and then with a fine leave of gold mask. After that, the skull is ceremonially buried. The court chronicle Cheitharol Kumbaba also records some events related to this culture: During the reign of Khagemba (r. 1597-1652 CE)] "The year of Ngampom Kapom, sakabda 1550 (1628 CE). They also took away gold and silver mask (death masks), separating them from the skulls. During the reign of Paikhomba An Archaeological Preliminary Report on the Coffin Finding With Reference to Malom Tuli-Yaima 2021 Dissertation Submitted to History Department, M.U. Page 26 (r. 1666-1697 CE)] in the year of Keisam Lanhang, sakabda 1606 (1684 CE) in the month of Langpan……. Yirom Loinai Ngasingpa and Nukram Monsampa, these two and others exhumed the skulls of all the land. Gold and silver (discovered) were presented to Ningthem [King]." The last record of mass exhumation of royal graves was during the reign of Garibniwaz in 1725. The court chronicle records, that "On April 1, 1725, Garibniwaz dug out all the graves of his ancestors and performed the cremation ceremony of their skeletons and heads on the bank of the Ningthi River (Chindwin River, now in Myanmar)." We can ask ourselves the question, "Why is there only one LuPhou-Nung? Why is it only in Kangla?" If the practice of earth burial and exhumation of the coffin after a year was a common practice, there should be a Lu-Phou-Nung in every locality? According to scholar Leimapokpam Gitchandra, the practice of burial of the dead was common only in the royal families and relatives. The dead body of a common people was cremated not buried. And uncommon/unnatural deaths like Lai Oknaba, Leithung Pakpa, Lairen oknaba, had to perform water burial. Deaths bodies due to suicide are to be thrown away at Mangakanbi in Langol. Several burial excavations in Sekta explain otherwise. Those burials are not of royal families but common people. But still, the existence of the practice of cremation can be proved by the Story of Konthoujam Lairembi, where the smoke An Archaeological Preliminary Report on the Coffin Finding With Reference to Malom Tuli-Yaima 2021 Dissertation Submitted to History Department, M.U. Page 27 of burning her family dog unnerved her thinking whether there was death in her family. During the reign of Meidingu Naophangba, there was a complaint by the people that outside the traditional line, a dead body was buried in whole by a migrant priest leading the dead human body to be desecrated by wild animals. There was a quarrel between the court scholar Angang Laiba and the migrant priest regarding the matter (Geetchandra). All these suggest that the early Meitei practiced a wide variety of death disposal systems such as burying whole, cremation, thrown out in the wild, thrown out in the water, secondary burial after exhumation of the coffin, secondary burial after the cremation, etc.

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2. L Bhagyachandra Singh- A Critical Study of the religious Philosophy,1991,p.119-121

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5. Ibid.,p.26

6. Wangam Somorjit,op.cit.,pp.28-29. 7.

Wangam Somorjit,op.,cit.,p.28-29.

8. Ibid.,p30 9. Ibid.,p.30

10.Naoroibam Indramani and Dr. Haorungbam Rajmani,Imphal,2017,p.59.

11.Wangam somorjit,op.cit.,p.29-30

CHAPTER 4 ANALYSIS OF THE FINDING ARTEFACTS

DUGOUT COFFIN:

The coffin was dug out from a wooden trunk of diameter at least 70 cm. It was cleaved into halves and one of the halves was hollowed out. The coffin was semi-polygonal in shape, the inside of which was dug out in the shape of a boat. The lid of the coffin was a flat wooden slab. The coffin was dug out from head to tail; both ends were covered by two wooden slabs of a polygonal shape. Both the sides of the coffin were again protected by two wooden slabs of length equal to the main body. The approximate measurement of the coffin was 173 cm in length, 66 cm in breadth, and 36 cm in height. Dugout log coffin culture was a widespread funerary practice in Europe, Egypt, China, South East Asia, etc. Burial in a dug-out log coffin was hardly an 'unaccustomed fate' in Scotland and across Europe at the time of Bridei's death. Indeed, there is a single excavated example of a log coffin from outside St Columba's Shrine at Iona, described further below. The evidence for log coffin burial in Scotland is thus already ambiguous – on the one hand, it is portrayed as a lowly, even demeaning form of burial. On the other, it was remembered as an appropriate receptacle for a king and can be found in a privileged position at the heart of a major monastery.1

Fig 1: Dug-Out coffin found from Malom Tuli Yaima Archaeological research indicates that log coffin burials were a widespread mortuary practice in Southeast Asia. In Asia, the distribution of log coffins, which were typically preserved in caves of limestone karsts formations, ranges from southern China through the uplands of Vietnam, Myanmar, and north-western Thailand to the islands of Borneo, Sarawak, and the Philippines. During the Log Coffin Culture period or Iron Age (2,200 years BP to 9th century AD), the sites were located almost at the top of the limestone cliffs and were primarily used for burial. No evidence of habitation has been found. Fig 2: Cover and Side-Plank of the coffin from Malom Tuli-Yaima Wooden coffins with various head styles are diagnostic of this period. In Southeast Asia, a log coffin at Niah Cave gave a 14C date of 2,620 ± 220 and 3,080 ±40 BP, while a coffin from Kuruswanan Ledge, Tabon Cave on the Philippines was dated, using other means, to the late 13th or 14th century AD. An extensive archaeological excavation in Surigao

Del Norte on the north-eastern coast of Mindanao found a stone structure enclosing a portion of an area with burial pits and a dug-out wooden coffin. The wood samples were identified and came from several tree species found in a mixed-deciduous forest, such as Pterocarpus indicus, and in a mangrove forest, such as Caryopses, which was mainly of medium size and used for posts. One coffin has been radiocarbon dated to AD140±390.2 Numerous such coffins made from teak trunks have been discovered in dry caves in the Pang Ma Pha district, Mae Hong Son province in Thailand. Many of the caves and rock shelters in Mae Hong Son Province have been continuously settled since prehistoric times. One of the main archaeological features of these caves is their log coffins. A local culture used elaborated log coffins in its burial ceremonies. Unlike the founds in Malom Tuli Yaima, where only a half of the log was dug out, these log coffins were typically made of teak logs split into halves and both halves were dugout inside. One half was the lower portion and the other was a cover. Both the lower portion and the cover had two ends, called heads, while were decorated with carvings of different styles. A striking feature of these carvings is the head-like shapes which can be categorized into two basic types. One type was simple — it has no facial features, merely a head-like shape. But the coffin of Malom Tuli Yaima has no such head-shaped structures. Three burial coffin traditions practiced in upland Ilocos Sur; the Philippines were identified in the archaeological survey. These traditions were provisionally called the "Patiacan," "Apaya," and "Danac" traditions after the barangays where the burial coffins were discovered.

THE PATRICIAN TRADITION:

Two horizontal log coffins were found at the site. Both coffins were carved out of whole trunks of pine trees (Pinus insularis) split into two pieces forming a semi-polygonal shape, with a thick body and a thin lid. Both pieces were hollowed out to accommodate a corpse in an extended/lying down position. They were fastened by two pegs at the perforated tongues at the head and foot of the coffins.

THE APAYA TRADITION:

The carving technology is similar to the Patiacan coffins except for the Apaya coffins' zoomorphic design. The coffins were carved from a massive tree trunk split into two pieces in the centerline with both pieces (body and lid) initially measuring the same. The body was then carved to a slightly smaller radius compared to the lid. Thus, the finished coffin has a heavier lid compared to the body. One end of the lid was then carved to resemble the head of a carabao while the foot tapers off to a tail.

THE DANAC TRADITION:

The Danac coffin was vertical/upright and the trunk was hollowedout with open ends. It can be described as a vertical cylindrical trunk coffin with a limestone lid. Both the limestone and the tree trunk coffin were superbly carved into shape.3 The dug-out coffin found in Malom Tuli Yaima was not a lone culture practiced only in Manipur. It is a common practice found in a wide geographical area. With slight differences in

style and structure, cultural affinities can be seen in all these common funerary practices.

MULTIPLE/COMMINGLED BURIAL:

The term commingled burial refers to the burial of multiple individuals within a single context. These may be primary burials or secondary burials (i.e., buried after some decomposition at another location). The comingled burial place is also known as mass graves. Mass graves contain multiple bodies that may become inter-mingled and disturbed during decomposition (Commingled human remains can be defined as the mixing of the elements of multiple individuals into a single archaeological or forensic context). This can occur through both natural and cultural mechanisms, and usually, both will affect the way archaeological assemblages can be examined. This can complicate excavation and analysis in the lab. This is particularly the case with graves from war contexts in which many of the combatants same age and sex (i.e., young mam) the bones cannot easily be separated into individuals. Commingled burial may not be the primary deposition site. The primary deposition site is the location that a body is first placed after death. It may or may not be the place in which a person was killed. In some scenarios, bodies are removed from the primary deposition site and placed in a secondary deposition site. Different primitive societies practiced this culture including the Meitei society. If bodies are moved from one site to another after deposition, the bodies become increasingly disarticulated. When excavating a commingled burial, it is clear whether it is primary or secondary from the articulation of the skeletons. If all of the bones are in the correct anatomical position, it implies that it is a primary burial. If the bones are jumbled in any way or if certain bones are missing then this implies some degree of decomposition elsewhere. An example of a secondary burial that most people are familiar with is an ossuary. This is when skeletonized bodies are dug up in a churchyard to make space for more burials and selected bones from these bodies are stored within the church. Please note that bones may also be disturbed by natural processes such as water and it is important to differentiate between these and human disturbance.4 Here, another important point to be noted is that there was a long tradition of headhunting in Manipur as well as various places in South East Asia. This tradition survived in Manipur till 1725 when Meidingu Pamheiba declared Ramandi to be the State religion and forcefully converted the Meiteis into this sect of Hinduism. Among the non-Hindu communities particularly the hill tribes, this tradition was widely prevalent up to 1895 when Christianity becomes prevalent in the hill tribes5 . This head-hunting culture exists in Manipur due to its similarity in racial as well as physical conditions of the environment. The head-hunting tribal people who also practiced Fig 3: Collection of Bones excluding the lower jaws, braincase bone fragments, and the femur head of human hips burial system followed the tradition of burying the heads collected during the lifetime of the individual when the person died. Under this circumstance, commingled burial doesn't mean the occurrence of war, plague, mass genocide, etc. It is just a social custom of proving the bravery of the warrior during his life and the life after death. To analyze commingled remains, any non-human material should be removed from the commingled context. Such material may include animal bone,

personal effects, and so on. Determination of non-human status is based on the shape, weight, etc of the bones examined. The spatial analysis method of associating body parts relies on the assumption that parts of a body will remain close to each other. Therefore, minimum distances between matching body parts can suggest a relationship. Other methods commonly used in the commingled burial studies include DNA testing, X-ray efflorescence, osteometric sorting, visual pairing method, etc. X-ray fluorescence is a method that fires radiation into a sample and captures the energy released by the electrons from the atoms when excited. The energy released correlates with elemental composition. This is usually a labbased method, but the portable variety allows application in the field. DNA is unique in everyone but is challenging to use in a commingled grave context due to cross-contamination. It is also expensive and destructive. However, in this context, we mainly used the osteometric sorting and visual pairing method for our convenience. The visual pair matching method is based on the notion that bones from a given individual will show size, shape, and colour similarities. This may be the case, but people can be quite asymmetric (e.g., have one leg shorter than the other) and the soil staining may differ across a single skeleton. It is often the long bones, such as the Homeric, that are used for this approach. This method also relies on years of experience to improve the accuracy of assessments. And Osteometric sorting method is based on two things – 1. that the human skeleton is largely symmetrical and therefore bones from the left and right side of the body will be approximately the same size; 2. that articulating bones will be of comparable size to 'fit' together.6 As quite a several years passed buried under the moist surface, most of the bones are found in pieces. The quantity of the bone fragments is quite big, indicating/hinting at the burial of more than one individual. Unfortunately, we do not have the privileges to scientifically test the genetic details, so we are in the dark position regarding the racial questions of the people buried here. Only the limbs and jaw are in better condition. Whether the bone fragments included the bones of other species is not clear, but from what we have seen, we can assume that all these are bones are of humans. The limb's bone fragments excluding that of the palm and fingers, joined together, all in one line is too long and can be said confidently, these pieces came from more than one human body. And as the length of the coffin is 172 cm, the full-body burial is not possible in this case. Again, none of the bone fragments are previously cremated and no charcoal pieces were recovered in the process. Fig 4: Five pieces of femur heads The upper round-shaped of the femur is found to be five in number. That is, the femur head extended from the thigh bone and joined to the coaxal bone of the hip is five. As we know, this extended bone of the thigh to the hip is only two in a human body (left and right). This proves the burial of more than one human body (at least three individuals) in the same coffin. The femur/thigh bone is the most proximate bone of the leg, closest to the hip joint. The head of the An Archaeological Preliminary Report on the Coffin Finding With Reference to Malom Tuli-Yaima 2021 Dissertation Submitted to History Department, M.U. Page 40 femur articulates with the acetabulum in the pelvic bone forming the hip joint. Out of the five round-shaped femur heads, one of them is smaller than the other four because of this we can assume that one of the individuals is very young.

CRANIAL VAULT BONES:

Fig 5: Photo of cranial bone fragments recovered The Cranial VAULT BONES/braincase, all broken into pieces, are found in large numbers. The human brain is the most developed in all animal species. So, humans have a large braincase. But the quantity of cranial vault pieces recovered is much more than expected from a human individual. If we place all these cranial vault bones together and measure the area covered by it, it would cover an area of about 213 inches2 or 1374 cm2. This also gives us the clue multiple individual cranial vaults. LOWER JAW OR MANDIBLE: Mandibles of lower jaws are found broken in halves. Four such halves of the mandible are found from this excavation. The upper jaw which is a part of the cranium is fragmented into numerous pieces along with other immovable bones of the skull and cannot be identified with manual methods. Fig 6: Four halves of lower mandible. The four halves of the lower jaw or mandible are different in shape and size. Only one of the halves among these four halves is from the right side of the lower jaw or mandible. The remaining three halves of the mandible are all from the left side of the lower jaw bone. Of these four halves, only two of them can be joined together to form a full mandible of a human jaw. This also proves that these three left halves of the mandible belong to three different individuals. From there three left sided lower jaw bone, only one of them is in perfect similarity with the one from the right side. The remaining two left-sided mandibles are in different shapes and sizes. One of the two is smaller and appears to be that of around 10 to 15 years of age. As indicated by the marks left behind by the roots of the teeth on the jaw bone, the second and the third molar are yet to be grown. The other left half lower jaw bone which cannot be paired appears to be that of an adult human. It has tooth marks up to the third molar. It is quite distinctly longer and bigger than the other halves. But the interesting thing here is that this left half of the lower jaw saw a fracture of two centimeters from the 2nd premolar to the beginning of the 2nd molar. This region of the jaw is broken and lost and the missing part is partly healed up during the lifetime of the individual. This brought us to assume that the owner might be a warrior. The other remaining left halves which are in perfect similarity with the only right half of the lower jaw bone is seen to have no abnormality. It had grown up to 2nd premolar, which indicates that the individual is around 15 to 20 years of age. TEETH: The course of human evolution has always intrigued researchers worldwide. The changing ecology during the history of the earth is thought to play a very crucial part in the way the earliest humans evolved. They adapted themselves to the changing environment in more ways than one. The selection of diet was one such critical way of surviving in the contemporaneous milieu. Most commonly the only remains of these earliest humans that survive the test of time are teeth. Consequently, with no other organic evidence in hand, human teeth are exploited the most by researchers to know the type and form of food they consumed. Teeth are formed early in human life. According to Sangeeta Mahajan, approximately six months after birth, the deciduous dentition serially appears in the mouth. After the weaning, as the individual switches over to solid external food tooth wear and tear starts. At around 2½ years of age, the first permanent molar takes its position behind the deciduous second molar. The last

permanent tooth to erupt is the third molar at the age of 16-18 yrs.6 This report, however, is inconsistent concerning the age of eruption of permanent molars of the South East Asian particularly the Mongoloid people. The first permanent molar erupts at the age of 4-7 and the last permanent molar erupts at the age of around 21-30. There were also cases in which the last permanent molar erupts in the early 40s. And in some persons due to inadequate jaw space, the third molar never erupts in the oral cavity. The ethnic, cultural, hereditary, environmental, endocrine reaction and nutrition all play a part in the eruption and calcification of teeth. Eruption tends to occur earlier in warmer climates and urban areas. Dental wear and tear is a function of the type of diet, masticatory forces, and the non-masticatory use of teeth. The tooth wear due to natural contact between upper and lower teeth is called 'attrition'. The wearing of a tooth caused by contact with external objects is called 'abrasion'. Study of tooth wear as observed by the naked eye is tooth macro wear study.7 Tooth macro wear can be studied in two ways. One is by comparing attrition of teeth in an individual concerning the first molar tooth in the same mouth. This is useful in age determination in cases where the sample is un-aged (age not determined) due to any reason. The pattern of attrition related to the first molar gives an indication of age at death. The second way is to compare the amount of attrition between different individuals to know the differential use of teeth concerning diet or that due to non-masticatory purposes. Due to better preservation and good resistance to digenesis, owing to tough enamel covering, teeth have been exploited the most in archaeological studies. An Archaeological Preliminary Report on the Coffin Finding With Reference to Malom Tuli-Yaima 2021 Dissertation Submitted to History Department, M.U. Page 45

Tooth wear analysis is a powerful tool to understand the diet and life processes of ancient people.8 Fig 7: A collection of human molars found inside the coffin. The total number of teeth recovered from the Malom Tuli Yaima Burial site is 67. Due to long years of exposure to the moist environment, several teeth are in bad condition due to decomposition in the muddy soil. Due to lack of lab infrastructure, only macro wear studies can be performed. One thing that can be said confidently is that one of the buried people is young and his 2nd molar is still very sharp and clear. No comparable 3rd molars are found and seem to have not yet grown at the time of death. As we all know that teeth of a young human or animal are very sharp. Continuous use during its lifetime makes it eroded and dull later. Other teeth are all dull and colored to some varying degree. And in some colored 3rd molars, there is no sharpness and the crown of the molar almost looks flat. This show owner of these teeth is very old. Hard nuts, grains, and unrefined food seem to be taken frequently. Unlike the present day, the people buried here do not use soft and refined foods. And they might have used their teeth as a tool. The color of these teeth shows that betel nut and lime is eaten regularly. From the above evidence, we can conclude that there were at least 3 different individuals buried together in this coffin and resemble a commingled burial. Again, though the size of the coffin is large enough for one individual, it is not possible for the intact burial of three individuals together. Besides, few pieces of burial potshards were found. All these mean that,

1. This is a commingled burial of three individuals

2. The primary disposal of the death was not a cremation

3. The secondary burial is an urn burial inside a dugout wooden coffin

4. The three individuals buried in this coffin are different in ages, so, no evidence of wartime death. Fig 8: Memorial photo of three siblings before burying together. Though it is hard to find literary evidence of commingled burial its practice is not all extinct still today. As an example, on March 19, 1999, three siblings named Holly (female), Wangsing (male), and Sangpril (female), date of birth 1989-1-29, 1992-10-09 and 1995-06-09 respectively of a Lamkang tribe from Kongpe village, Chandel district, were buried together on the same day interned in a single coffin on 1999-05-19. Such commingled burial systems were also practiced during the Naga-Kuki conflict in 1992. Fig 9: Memorial photo of a commingled burial grave.

ORNAMENTS:

RINGS:

A total of seventeen rings were discovered in this excavation. Two of these rings are made from iron. In due course of time, these two iron rings were stuck together due to rusting. One of the rings is made of pure copper. Another one is made from aluminum. Unfortunately, a ring with elaborate carving and designs is found only in pieces. The remaining 12 rings are all made from some form of copper alloy with varying compositions. The three rings one of copper, one of aluminum, and the other with elaborate carvings and designs, are a bit smaller than the other. The two rings made from copper and aluminum Fig 10: Metallic rings found from the coffin respectively, are plain and simple. They are made by bending two small rods, one copper and the other aluminum, in a circular shape. Both edges of the rings are not joined together. All these rings are in different shapes viz. oval shape, half-round shape, round shape, flat ring, etc.

BEADS:

Four types of beads were found:

1. Three beads of silver were found. These beads have an external diameter of 1 cm with only a needle hole in the center. Possibly, these beads were used to wear around the wrist of an arm.

2. A large number of beads green in color were found. The material used to make these is still unclear. They are an article of jewelry worn around the neck.

3. Another type of beads was found in the largest number. This type of bead is a little smaller than the green one. This bead is blue in color and spherical in shape.

4. The remaining type of beads is the smallest of all. The external diameter of this type of bead is 0.18 cm only. It is yellow.

The last three types of beads are an article of jewelry worn around the neck, or they might have been string together to make a single composite necklace. The discovery of beads and rings in huge numbers suggests that the people buried were of noble status. A commoner could not offer such a huge number of rings of different types. Moreover, the rings made of different copper base alloys indicate the advanced metallurgical skills of the society. Fig 11: Different types of Beads found inside the coffin.

A BLACK WOODEN CASKET:

A black wooden casket/ treasure box/ sacred box was found. This wooden casket is made of plywood. The length of the casket is 18.6cm and the breadth is 13 cm with a height of 8.6 cm. The box is made of regular plywood of thickness 1cm. This black wooden casket is black and is coated with a black plastic-like substance to make it shining and last longer against the agent of nature. The coating substance is a pure water-resistant Material. Had this not been the case, the wooden box would be decomposed completely and would have never been found in the first place. The skills employed by the craftsman in making this casket are surprisingly praiseworthy. As we have known, the Manipuris use the technology of coating the coat with wax to avoid rain from the time of Fig 12: Pieces of a black wooden casket king Khagemba. We may assume this water-resistant coating technology to be derived from that during Khagemba's time. This may be a significant point in the relative dating of the period. The wooden casket is partitioned into four chambers. The plywood used in the partition is 1cm think in a horizontal line (longer one) and 0.5 thick in a vertical line (shorter line). Each chamber has an internal area of (10x9.5) cm. sq. The purpose of this casket may be to store the jewelry or ritual items. As this casket was found to be dismantled, we are not sure about what was kept in this casket. Nevertheless, the Meitei practice of keeping a wooden casket to store precious items in every household is still common in today's society.

BAMBOO/CANE BASKET:

Three baskets of different weaving styles were found inside the coffin. All the baskets are small in size. It seems to be like that of a "Meruk", the Meitei basket used to measure rice quantity in the kitchen. These baskets are skilfully woven and coated black plastic-like substance. This coating material is water-resistant and is the same material that is used in coating the wooden casket. These Skillfully crafted baskets could even hold water for days without leaking a single drop. These baskets are found only in pieces. The number of baskets was counted from their differences in the style of weaving pattern. Two of the baskets are pitch black and the other one was brown-black. The difference in the styles in weaving is distinct at the top edge of the baskets. Naturally, the top edge of the basket is thicker than the rest of the body and is woven in a way that it can hold pressure and strains and avoid being torn when picking up weights by holding the top edge. Fig 13: Fragments of three types of bamboo or cane basket. The strength of bamboo or a cane basket depends on the strength of the top edge and the bottom corner.

1. in one basket, the thick strip at the top edge weaves vertically and the breadth of the strip is 8 mm.

2. in another basket, the thick strip at the top edge is woven slanted from the top left and the breadth of the strip is 3.5 mm.

3. in the third basket, the top edge is woven thickly from the top right in a slanted position for about the breadth of 5 mm.

After that, it is woven again a little more than the lower body for about 10 mm horizontally. At the middle of the height, in all the three baskets, it is again horizontally woven by a thick strip of 7mm wide. At the bottom plane of the basket, two pieces of bamboo strip are fixed in cross position from each corner to reduce tension due to the weight to be carried.

DISCOVERY OF HOOKAH:

Gong-shaped and bell-shaped objects were discovered. The shape and style of the gong shaped artifact are very elegantly polished and shining. An easy way to understand the shape of this gong-shaped object is to assume the shape of a Gada (the weapon of Hanuman, a monkey King in Hindu myths). The head of the gong shape object is in the shape of a lotus which is yet to bloom. The lower half is carved in the shape of a screw. The total length of the gong shape object is 4.6 cm, the diameter of the head is 1.9 cm, and the length of the screw leg is 3.1 cm. It is found embedded in a bigger rusted iron object which is yet to be identified. At first, it was accepted as a gong, but after careful observation, it raises a question on why the lower half of a gong is shaped like a screw. Fig 14: A bell shape and a gong shape metallic object. The gong shaped bronze object is carefully casted and it still looks like a newly casted object. The bell-shaped object is made from a hard alloy of copper and tin with higher tin contain. The object is carved out horizontally by two thin lines on the outer surface. From the upper neck, seven pairs or bigger lines were carved out vertically. Then, from each pair of vertical lines, a slanted line is carved out starting from 1 cm from the bottom end of the line up to the bottom of the next pair of vertical lines. The neck of the bell-shaped object is hollowed out. The hole in the neck is 8mm in diameter. At the bottom end of the neck, the hole is smaller to only 3mm in diameter, which makes us curious about the purpose of the hole in the neck. Upon further observation, we found some black shoot at the internal wall of the bell-shaped object. This proves that something is used to burn inside. So, we re-examined again by bringing the object upside-down. The bell-shaped object must have been used by embedding its neck to a smaller object, though we do not find the exact shape of the smaller object. But since we found some rusted iron junk iron object, we may assume this as the missing piece above which the bell-shaped object is embedded. Something was used to burn inside this bell-shaped object and this bell-shaped object has a hole below. The outer surface does not have any black shoot. It was used embedded in a smaller object. The object was be made from iron. In another case, we found some wooden pieces; one of them has a diameter of 4.6cm. This wooden price has two holes, one vertical and other slanted, and both holes are

joined together at the bottom end of the wooden piece. If we consider a long pipe embedded in the vertical hole, and the upper end of the pipe is again embedded to the bell-shaped object, we make up the upper part of a modern hookah. The slanted hole in the wooden piece is to be used by embedding a long flexible pipe to inhale the smoke. Now the missing pieces of this hookah are the water container port, a purge valve/ air valve and the long flexible pipe, and a cool tray. The air valve or purge valve is the gong shaped screw. An Archaeological Preliminary Report on the Coffin Finding With Reference to Malom Tuli-Yaima 2021 Dissertation Submitted to History Department, M.U. Page 58 By this assumption, it solves our previous curiosity of why the gong shape object is carved out in the shape of a screw. Again, this gong shaped screw was found embedded on a bigger piece of rusted iron. This gong shaped brass object must be the purge valve of the hookah. The lower end of the hookah, the water bowl must be made from terracotta and is now broken into pieces. This bowl must be hollowed from top to bottom. The top hole is embedded upon by a wooden stem which we have mentioned above. And the bottom hole was embedded on another bigger wooden piece. This wooden Fig 15: Photo of an Indian potter smoking Hookah. hookah stand is seen with a clear embedded mark of the water bowl. This wooden piece is a stylistic hookah stand with elaborate carving designs. In sum, we can make up our mind of a modern hookah, the tobacco bowl is made from bell metal with high tin contain. Its bottom hole is embedded in an iron pipe. The iron pipe is then embedded upon a hollow wooden stem which has another hole for the hose or the mouthpiece to connect. This wooden stem is connected to the water bowl. The embedding mark of the stem and the water bowl is visible. The water bowl made of red terracotta is then embedded upon the wooden hookah stand. The hookah or water pipe was invented by Abu'l-Fath Gilani, a Persian physician of Akbar, in the Indian city of Fatehpur Sikri during Mughal India. The hookah spread from the Indian subcontinent to Persia first, where the mechanism was modified to its current shape, and then to the Near East. Alternatively, it could have originated in the Safavid dynasty of Persia, from where it eventually spread to the Indian subcontinent. In ancient times, people used natural materials such as dried coconuts, partially filled with water with two reeds. It served as a hookah on the islands and the coast of Hindustan. More reusable and resistant items for smoking were hookahs made out of stones, bones, and baked clay. In the Indian city of Fatehpur Sikri, Roman Catholic missionaries of the Society of Jesus arriving from the southern part of the country introduced tobacco to the Mughal emperor Akbar the Great (1542–1605 AD). Louis Rousselet writes that the physician of Akbar, Hakim Aboul Futteh Ghilani, then invented the hookah in India.9 Also, according to Dr. Moirangthem Ranjana Devi, smoking of tobacco Fig 16: The recovered Hookah parts. started during the reign of King Khagemba. Therefore, this incident must have occurred during or after the reign of the said king.

CERAMICS CRAFTS:

The term "craft" denotes a skill, usually employed in branches of the decorative arts (e.g., ceramics), or an associated artistic practice (e.g., lace-making). A key feature of crafts is that they involve a high degree of "hands-on" craftsmanship (hence the

colloquial term "handicrafts) rather than just skill with a machine. Some crafts that are practiced by artists working alone are sometimes referred to by the vague term "studio craft". Metalwork, woodturning, glass blowing, and glass art are examples of "studio crafts", as is pottery and other ceramic crafts.10 Fig 17: Six tobacco hookah bowls found in their original shape. Large numbers of ceramic artifacts were discovered at the site under study. The most significant of all is the tobacco bowls. These tobacco bowls were used as in hookah, probably in place of the bell metal hookah bowl. Ten such bowls were discovered. All of them are different in shape, size and decoration. Six of them were discovered in original shapes. The remaining four were found to be broken due to the weight of the soil above them. Fig 18: Broken pieces of four terracotta hookah bowls. Two out of the ten hookah bowls were already used before the internment in the coffin. This is indicated by the presence of black shoot in the internal wall of the bowls. We do not know if they were used by the buried individuals in their lifetime or by a third person. As the system of burial is secondary burial. Again, none of the bones were burnt. It will take around a minimum of one year for the body to decompose properly. So, if those two bowls were used during the lifetime of the buried individuals, it has to be kept preserved for at least a year before the internment in the secondary burial coffin, which is possible but rarely. The remaining eight ceramic hookah bowls were made just before the secondary burial ceremony. None of them have marks of being used before. These ten hookah bowls were different in shape and size. They were also engraved in different patterns. But the bottom hole of all these hookah bowls has a similar size. They can be embedded on the same hookah stalk. All the hookah bowls are of local origin and are handmade, in some cases; there are signs of using the strip method. Firing is probably done in the open with low temperature. Decoration is done by Impressing with a carved paddle in the designs of herringbone, ribbed, chevron, and diamond-shaped patterns, incising in bands of open triangles and wavy lines with a multi-prong comb-like instrument. Making these terracotta objects is quite exclusive to the most skilled artisans of the time. Every piece of this terracotta art is done with utmost dedication and grace. Every piece also takes a great deal of time and patience, which is why these terracotta bowls should be treated with reverence. We also found another type of terracotta baked object. It is very plain and simple in design. It is rectangular with a dimension of 17x4 cm. Seven such objects were recovered. Out of which, six of them are brown. The remaining one is made of black clay baked at low temperature. The purpose and belief for making this type of object are still unclear and further research is needed. Fig 19: Terracotta objects of unidentified purpose. The remaining ceramic artifacts that need to mention are the potshards. Potshards are found in small pieces. Many more pieces are missing. These potshards are of different styles and are from different earthen-wares. One of the pieces has a thickness of 2.3 cm. It is made of red soil mixed with coarse sand and backed in low temperature. It is a broken piece of burial urn. The outer surface has stamping marks. The internal surface of the potshard is rough and irregular. Another piece of grey color earthenware has a similar thickness to the above one but this earthenware is not baked in fire. It has a pattern of wavy lines on the external surface. It is also a piece of burial urn different from the one before. Fig20: Potshards

recovered from the excavation. Other pieces of potshards are small in size. They all have different colors ranging from pitch black, blackish grey, reddish, brown, etc. They have different geometrical markings and only a few of them are plain with no decoration

METALLIC OBJECTS:

Mentions have been made about the findings of bell-metal hookah bowl and gong shaped purge valve. We also mentioned the finding of various metallic rings and beads. We also found pieces of thin sheets of bronze. After assembling them, we found a complete set of 9.4 cm diameter bronze plates. Fig 21: Photo of thin bronze fragments. This bronze plate is nothing different from what the valley people use today in their morning and evening worship of god. The remaining pieces need further research to clearly explain their original shape and purposes. Another metallic object which is a great significant indicator of the socio-economic condition of the past era is the rusted iron objects found in pieces. These iron objects are highly rusted and broken into pieces. It is not easy to identify the Fig 22: Rusted and broken iron objects. the original shape of these pieces. But with careful observation, we can categorize these pieces into three types,

1. Iron pipe of diameter 1.3 cm,

2. Square iron rod of a side length 0.7 cm,

3. A flat and elongated iron piece that looks like a knife-edge and

4. Other remaining pieces of iron which shape cannot be known due to heavy rusting.

Here we should remind you that the hookahs which we mentioned above were missing the hollow pipe to be used as the stem. The hollow iron pipe of diameter 1.3 cm is likely to be the stem of the above hookahs.

STONE TOOLS:

One of the interesting problems is finding five small stone tools, all made of marble. Out of the five stone tools three are chipped out from bigger rocks in the shape of arrowheads. These stone objects are very elegant and sharp. They are beautifully carved and will be very effective as arrowheads. But the problem is that the existence of these stone objects could not confine the culture into Stone Age. We cannot assume this culture as a chalcolithic based on only these five stone tools. The findings of iron objects are enough to prove this. So, the stone tools we have, must be of some ritual value in the said culture. As people tend to see human Face, animals, and birds in clouds. It is possible that such 'simulacrum' would have provoked recognition of a life force in rocks, as though these rocks were possessed by animus spirits. Several researchers have proved that rock art and such simulacrum have a deep Fig 23: Stone tools found inside the grave connection with enforced animation or idolatry. The notion of rocks behaving in human-like ways is a religious phenomenon with an extremely wide geographical distribution. Rocks have

been perceived to be alive by numerous people living on all continents, including Saami, the Ojibwa of North America, the Nayaka of south India, and the northeast Tribesmen, to mention but a few examples. The acts of 'enforced animation' on natural objects may today seem somewhat 'primitive' but to our ancestors such acts were likely deemed of great spiritual significance. The recognition of 'spirit' forms in nature and the subsequent attempts to communicate with them is an important part of the human journey and one which has its roots in all modern religious doctrines11. We can see in today's Manipuri society that both idolatry and worship of stones are continuing.

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CHAPTER 5 CONCLUSION:

The findings of the Malom Tuli Yaima grave excavation are very important in the sense that it gives us a new orientation to our existing idea of burial system in Manipur. The study proves the existence of a unique burial system that has no mention in the vast literary sources of Manipur. What we found in literature must be in congruence with archaeological evidence, but that does not mean that what we found in the archaeological excavation is wrong if we do not find equivalent literary support. As we already mentioned that archaeology is the study of the footprints of past human lives. What we lacked in our literary sources should be filled up by archaeological research. A rare occurrence may it be, the findings of this research provided evidence of the existence of a commingled burial system. The grave under study contains a single coffin with the evidence of three individual death bodies. The three individuals are of different ages. One of the individuals might be a warrior as indicated by broken lower jaw, healed up during the lifetime of the said person. The structure of the coffin itself subscribes to the high status of the owner of this coffin.

A dug-out coffin made from a large wooden trunk of 1.5 m diameter is not possible without the manual support of a large number of people. A commoner could not afford such a dignified coffin. Besides, the offering of jewelry proves the high economic standard of the buried individuals. Offering 17 metallic rings as a grave offering is not an easy deal for common people. The recovery of a large number of metallic objects suggests the prevailing economic condition of time. Manipur lacked in the use of metallic objects and was a late practitioner of metallurgy in comparison to the west. But the finding of different types of metallic objects and different types of alloys proves the advanced knowledge of metallurgy of the society in the said time frame. The Manipuri society at that time has the metallurgical knowledge of iron, copper, aluminum, silver, bronze, brass, bell-metal, and different other alloys of copper with different compositions. The people of Manipur during the time believed in the life after death as is evident by the findings of a large number of grave offerings. The peoples have trade relations with the Indian sub-continent, probably Bengal. The idea of Hookah was brought to Manipur by the Muslim settlers during the reign of King Khagemba. The use of hookahs from medieval times in India was not only a custom but a matter of prestige. Rich and landed classes would smoke hookahs. And hookah was virtually unknown in Southeast Asia before the latter 20th century. So, the discovery of two hookahs and a large number of terracotta hookah bowls suggests the popularity of some aspects of Muslim culture in Manipuri society. The finding of human bones of three individuals nullified the possibility of intact burial. The recovery of burial urn pieces proves it as secondary burial. This burial practice is different from that of Sekta burial practice where bones of different parts of the human body were interned in different urns and buried with grave offerings without a coffin. It is again different from the burial system practiced in the burial of Thawan Thaba where only the grave offerings were interned in the coffin. Missing burial urn pieces hinted at the possibility of prior exhumation of the grave. The mass grave exhumation was done first during the reign of King Khagemba for the recovery of gold from the graves of the royal families. The last mass grave exhumation was done during the reign of King Pamheiba when he declared Hinduism as the official religion of the kingdom. So, if the prior exhumation was done, the chronology of the grave will fall in the time between the reign of King Khagemba and King Pamheiba. Again, Hookah originated from the Mughals and it entered Manipur after the arrival of Muslim settlers i.e., during or after the reign of King Khagemba (1597-1654) and the burial practice was ended during the reign of King Pamheiba (1709-1751) when he adopted Hinduism. Again, as mentioned in chapter 2, according to the court chronicle Cheitharol Kumpaba, Charairongba (r. 1698-1709) was the last king of Manipur whose secondary burial ceremony was performed. So, the chronology of the grave will naturally fall in between the reign of the said two kings. Regarding the owner of the grave, as mentioned earlier, according to Scholar Leimapokpam Gitchandra, burial was practiced only among the royal families and relatives. At the same time, according to cheitharol Kumpaba, King Pamheiba exhumed all his ancestor's graves and cremated them. So, a royal family grave will not be likely to forget in this mass exhumation. It is possible only if the grave is a branch relative or a noble from another clan.

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